STATE OF UTAH  DEPARTMENT OF NATURAL RESOURCES  DIVISION OF OIL, GAS AND MINING											AMENDED R	FORM 3	<b>/</b>	
APPLICATION FOR PERMIT TO DRILL										1. WELL NAME and NUMBER Gate Canyon State 41-19-11-15				
2. TYPE OF WORK  DRILL NEW WELL REENTER P&A WELL DEEPEN WELL DEEPEN WELL										D OR WILDC	<b>AT</b> UNDESIGNATE	D		
4. TYPE OI		Gas We		ed Methane Well: I					5. UNI	T or COMMUN	IITIZATION A		ENT NAME	
6. NAME O	F OPERATOR		SASCO PRODUCT						7. OPE	RATOR PHON				
8. ADDRES	S OF OPERATO		Dr. East, Suite 10	00, Englewood, CC	), 80112				9. OPE	RATOR E-MA	<b>IL</b> vell@gascoene	rgy.com		
	RAL LEASE NUMI , INDIAN, OR ST	ΓATE)		11. MINERAL ON	WNERSHIF	in an	i) ei	EE (	12. SUI	RFACE OWNE		ATE 📵	FEE (	
13. NAME		-49945 VNER (if box 12	= 'fee')			J 02 @	50				R PHONE (if			
15. ADDRE	ESS OF SURFACE	E OWNER (if box	12 = 'fee')						16. SUI	RFACE OWNE	R E-MAIL (if	box 12 :	= 'fee')	
	N ALLOTTEE OR	TRIBE NAME		18. INTEND TO		LE PRODUCT	ON FR	ОМ	19. SL/	ANT				
(if box 12	= 'INDIAN')			-		ngling Application	on) N	o 📵	VERTIC	AL DIR	ECTIONAL 🗍	HORI	ZONTAL 🔵	
20. LOCA	TION OF WELL		FO	OTAGES	Q	TR-QTR	SE	CTION	то	WNSHIP	RANGE		MERIDIAN	
LOCATIO	N AT SURFACE		481 FN	IL 987 FEL		NENE		19		11.0 S	15.0 E		S	
Top of Up	permost Produc	cing Zone	481 FN	IL 987 FEL		NENE		19		11.0 S	15.0 E	_	S	
At Total C			481 FN	IL 987 FEL		NENE		19		11.0 S	15.0 E		S	
21. COUNT		CHESNE		22. DISTANCE T		181			23. NU	MBER OF ACI	RES IN DRILL 2524	ING UN	. T	
					illing or Co	25. DISTANCE TO NEAREST WELL IN SAME P (Applied For Drilling or Completed)								
27. ELEVATION - GROUND LEVEL 28. BOND NUMBER						000								
27. ELEVA				28. BOND NUME	BER						LLING WATE PROVAL NUM 41-3530		PPLICABLE	
27. ELEVA		<b>O LEVEL</b> 6725			<b>3ER</b> 412	27763	rm at	ion					PPLICABLE	
		6725	Length	Hole, Casi	3ER 412 ng, and (	27763 C <mark>em</mark> ent Info			WATER	RIGHTS APF	PROVAL NUM 41-3530	BER IF A		
27. ELEVA String COND			<b>Length</b> 0 - 300		412 ng, and C	27763		ion lax Mud	WATER		PROVAL NUM		Weight 15.6	
String	Hole Size	Casing Size		Hole, Casin Weight 48.0	412 ng, and ( Grade	27763 Cement Info		lax Mud	WATER	Cement	PROVAL NUM 41-3530 Sacks 400	Yield	Weight	
String COND	Hole Size	Casing Size 13.375	0 - 300	Hole, Casin Weight 48.0	412 ng, and ( Grade	27763 Cement Info & Thread 40 ST&C		8.3	WATER	Cement Type V	PROVAL NUM 41-3530  Sacks 400  326	Yield	Weight 15.6	
String COND	Hole Size	Casing Size 13.375	0 - 300	Hole, Casin Weight 48.0 32.0	412 ng, and C Grade H-4 J-5	27763 Cement Info & Thread 40 ST&C		8.3	WATER	Cement Type V Hi Lift "G' 10-2 RFC	Sacks   400   326   185   123	Yield 1.18 3.91 1.6 3.05	Weight 15.6 11.0 14.2 11.5	
String COND SURF	Hole Size 17.5 12.25	Casing Size 13.375 8.625	0 - 300 0 - 3000	Hole, Casin Weight 48.0 32.0	412 ng, and C Grade H-4 J-5	27763 Cement Info & Thread 40 ST&C 55 LT&C		8.3 8.3	WATER	Cement Type V Hi Lift "G'	Sacks   400   326   185   123	Yield 1.18 3.91 1.6	Weight 15.6 11.0 14.2 11.5	
String COND SURF	Hole Size 17.5 12.25	Casing Size 13.375 8.625	0 - 300 0 - 3000	Hole, Casin Weight 48.0 32.0	412 ng, and ( Grade H J-5	27763 Cement Info & Thread 40 ST&C 55 LT&C		8.3 8.3	WATER	Cement Type V Hi Lift "G' 10-2 RFC	Sacks   400   326   185   123	Yield 1.18 3.91 1.6 3.05	Weight 15.6 11.0 14.2 11.5	
String COND SURF	Hole Size 17.5 12.25 7.875	Casing Size 13.375 8.625	0 - 300 0 - 3000 0 - 1524	Hole, Casin Weight 48.0 32.0	ATTACE	27763 Cement Info & Thread 40 ST&C 55 LT&C	M	8.3 8.3 12.5	Wt.	Cement Type V Hi Lift "G' 10-2 RFC Hi Lift "G' 50/50 Poz	Sacks   400   326   185   523   1876	Yield 1.18 3.91 1.6 3.05 1.28	Weight 15.6 11.0 14.2 11.5 14.1	
String COND SURF PROD	Hole Size 17.5 12.25 7.875	Casing Size 13.375 8.625 4.5	0 - 300 0 - 3000 0 - 1524	Hole, Casin Weight 48.0 32.0	ATTACE	27763 Cement Info & Thread 40 ST&C 55 LT&C 10 LT&C  HMENTS  ITH THE UT	АН О	8.3 8.3 12.5	WATER	Cement Type V Hi Lift "G' 10-2 RFC Hi Lift "G' 50/50 Poz	Sacks   400   326   185   523   1876	Yield 1.18 3.91 1.6 3.05 1.28	Weight 15.6 11.0 14.2 11.5 14.1	
String COND SURF PROD	Hole Size 17.5 12.25 7.875  VERIFY THE	Casing Size 13.375 8.625 4.5  FOLLOWING PPREPARED BY	0 - 300 0 - 3000 0 - 1524 ARE ATTACHI	Hole, Casin Weight 48.0 32.0 5 15.5	ATTACE  ATTACE  DANCE W	27763  Cement Info & Thread 40 ST&C 55 LT&C  10 LT&C  HMENTS  ITH THE UT  COMI	AH O	8.3 8.3 12.5	WATER Wt.	Cement Type V Hi Lift "G' 10-2 RFC Hi Lift "G' 50/50 Poz	Sacks   400   326   185   523   1876	Yield 1.18 3.91 1.6 3.05 1.28	Weight 15.6 11.0 14.2 11.5 14.1	
String COND SURF PROD	Hole Size 17.5 12.25 7.875  VERIFY THE LL PLAT OR MAI	Casing Size 13.375 8.625 4.5 FOLLOWING P PREPARED BY	0 - 3000 0 - 3000 0 - 1524 ARE ATTACHI	Hole, Casin Weight 48.0 32.0 5 15.5 ED IN ACCORD	ATTACE  ATTACE  DANCE W  NEER	27763  Cement Info & Thread 40 ST&C 55 LT&C  10 LT&C  HMENTS  ITH THE UT  FORM	AH O	8.3 8.3 12.5	WATER  Wt.  GAS CO  PLAN  R IS OTI	Cement Type V Hi Lift "G' 10-2 RFC Hi Lift "G' 50/50 Poz	Sacks   400   326   185   523   1876	Yield 1.18 3.91 1.6 3.05 1.28	Weight 15.6 11.0 14.2 11.5 14.1	
String COND SURF PROD  WE AFF:	Hole Size 17.5 12.25 7.875  VERIFY THE LL PLAT OR MAI IDAVIT OF STATE ECTIONAL SURV	Casing Size 13.375 8.625 4.5 FOLLOWING P PREPARED BY	0 - 3000 0 - 3000 0 - 1524 ARE ATTACHI	Hole, Casin Weight 48.0 32.0 5 15.5  ED IN ACCORD VEYOR OR ENGIN	ATTACE  ATTACE  ATTACE  ATTACE  AURFACE)	27763  Cement Info & Thread 40 ST&C 55 LT&C  110 LT&C  HMENTS  ITH THE UT  FORM	AH O	8.3 8.3 12.5 IL AND G	WATER WITH STATE OF THE STATE O	Cement Type V Hi Lift "G' 10-2 RFC Hi Lift "G' 50/50 Poz	Sacks   400   326   185   523   1876	Yield 1.18 3.91 1.6 3.05 1.28	Weight 15.6 11.0 14.2 11.5 14.1	
String COND SURF PROD  WE AFF: DIR DRILLED)	Hole Size 17.5 12.25 7.875  VERIFY THE LL PLAT OR MAI IDAVIT OF STAT	Casing Size 13.375 8.625 4.5 FOLLOWING P PREPARED BY	0 - 3000 0 - 3000 0 - 1524  ARE ATTACHI LICENSED SUR	Hole, Casin Weight 48.0 32.0 5 15.5  ED IN ACCORD VEYOR OR ENGIN EMENT (IF FEE S DR HORIZONTAL	ATTACE  ATTACE  DANCE W  NEER  SURFACE)  LLY	27763  Cement Info & Thread 40 ST&C 55 LT&C  110 LT&C  HMENTS  ITH THE UT  FORM	AH O	IL AND GODERATOR	WATER  Wt.  GAS CO  PLAN  R IS OTI	Cement Type V Hi Lift "G' 10-2 RFC Hi Lift "G' 50/50 Poz	Sacks   400   326   185   523   1876	Yield 1.18 3.91 1.6 3.05 1.28	Weight 15.6 11.0 14.2 11.5 14.1	
String COND SURF PROD  AFF: DIR DRILLED) NAME ROG SIGNATU	Hole Size 17.5 12.25 7.875  VERIFY THE LL PLAT OR MAI IDAVIT OF STAT	Casing Size 13.375 8.625 4.5  FOLLOWING PPREPARED BY TUS OF SURFACE VEY PLAN (IF DI	0 - 3000 0 - 3000 0 - 1524  ARE ATTACHI LICENSED SUR	Hole, Casin Weight 48.0 32.0 5 15.5 ED IN ACCORD VEYOR OR ENGIN EMENT (IF FEE S DR HORIZONTAL	ATTACE  ATTACE  DANCE W  NEER  SURFACE)  LLY	27763  Cement Info & Thread 40 ST&C 55 LT&C  110 LT&C  HMENTS  ITH THE UT  FORM	AH O	IL AND GODERATOR	WATER  Wt.  GAS CO  PLAN  R IS OTI	Cement Type V Hi Lift "G' 10-2 RFC Hi Lift "G' 50/50 Poz	Sacks   400   326   185   523   1876	Yield 1.18 3.91 1.6 3.05 1.28	Weight 15.6 11.0 14.2 11.5 14.1	

Gasco Production Company
41-19-11-15
NE/NE, Section #19, Township 11 South, Range 15 East
Duchesne County, Utah
Lease No. UTU- #ML-49945

# **Drilling Program**

## 1. <u>Estimated Tops of Important Geological Markers</u>

Formation	Depth	Subsea
Wasatch	3125'	+3560
Mesaverde	7205'	-520'
Castlegate	9975'	-3090'
Blackhawk	10025'	-3340'
Spring Canyon	11025'	-4340'
Mancos	11344'	-4659'
Dakota Silt	15245'	-8560
TD	15245'	

# 2. Estimated Depth of Anticipated Water, Oil, Gas or Mineral Formations

Substance	Formation	Depth
Gas	Wasatch	3400' – 7205'
Gas	Mesaverde	7205' – 9975'
Gas	Blackhawk	10025' - 11125'
Gas	Mancos	11225' - 15245'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

#### 3. Pressure Control Equipment

All well control equipment will be in accordance to UDOGM Conservation Rules for 10M Systems and are as follows:

10,000# BOP with 4 ½" Pipe Rams 10,000# BOP with Blind Rams 5,000# Annular

Ram type preventers and associated equipment shall be tested to the approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline on pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

#### **Pressure Control Equipment Continued**

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed;
- b. whenever any seal subject to test pressure is broken
- c. following related repairs; and
- d. at 30 day intervals

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) the check valve shall be held open or the ball removed.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip, however, this function need not be performed more that once a day.

A BPOPE pit level drill shall be conducted weekly for each drilling crew.

Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log.

BOP systems shall be consistent with API RP 53 Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling cement plugs.

A rotating head will be utilized to set surface casing as in the casing and string design. This would be used as a diverter.

UDOGM will be notified, with sufficient lead time, in order to have a UDGOM representative on location during testing.

- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not yet been chosen to drill this well, most of the equipment for this depth will utilize 10M working BOP.
- b. A choke line and kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

#### 4. **Proposed Casing and Cementing Program**

a. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones abnormally pressured zones and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors including: presence/absence of hydrocarbons, fracture gradients, usable water zones, formation pressures, lost circulation zones, other minerals, or other unusual characteristics. All indications of usable water shall be reported.

b. Casin	ng Program				
	<u>Depth</u>	Hole Size	<u>O.D.</u>	<u>Grade</u>	Type
Conductor	300'	17 1/2"	13 3/8"	H-40	
Surface	3000'	12 1/4"	8 5/8"	J-55	LT&C
Production	15245'	7 7/8"	4 ½"	P-110	LT&C

c. Casing design subject to revision based on geologic conditions encountered.

d.	Cement Program
----	----------------

	Est. Top of Cement	Cement Type	<u>Yield</u>	Supply Wt.
Conductor	400	sxs Premium Type 5	1.18	15.6
Surface	326	sx Hilift	3.91	11
	185	sx10-2 RFC	1.60	14.2
Production	523 1876'	sx Hilift sx 50/50 poz	3.05 1.28	11.5 14.1

- e. Anticipated cement tops will be reported as to depth; not the expected number of sacks of cement to be used. UDOGM should be notified, with sufficient lead time, in order to have a UDOGM representative on location while running all casing strings and cementing.
- f. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the driller's log.
- g. The following reports shall be filed with UDOGM within 30 days after the work is completed.
- 1. Progress reports, per UDOGM Conservation General Rules "Sundry Notices and Reports on Wells", must

Include complete information concerning:

a. Setting of each string of casing, showing the size, grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing,

depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.

- b. Temperature or bond log must be submitted for each well where the casing cement was not circulated to the surface.
- c. Auxiliary equipment to be used is as follows:
  - 1. Kelly cock
  - 2. A bit float
  - 3. A sub with full opening valve.

#### 5. <u>Drilling Fluids Program:</u>

Interval Type	<u>Wt. (p</u>	pg) Visco	osity <u>pH</u>	Wate	r Loss Remarks
0-300'	Fresh water	8.33	1	7.0	NA
300'-3000'	Fresh water	8.33	1	7.0	NA
3000'-TD Fres	h water& DAP	9.0 - 12.5	30 - 40	8.0	10-12

- a. Sufficient quantities of mud material will be maintained on site or be readily available for the purpose of assuring well control. SPR will be recorded on a daily drilling report after mudding up. Visual mud monitoring will be conducted during operations.
- b. No chromate additives will be used in the mud system on State lands without prior UDOGM approval to ensure adequate protection of fresh water aquifers.
- c. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well.
- d. The use of materials under UDOGM jurisdiction will conform to the Conservation General Rules.
- e. Water will come from: Water Right No. 41-3530.
- f. Water will be hauled by commercial transport over the access roads shown on Attached Maps "A" and "B".
- g. No water well will be drilled on this lease

## 6. Evaluation Program

The anticipated type and amount of testing, logging and coring are as follows:

a. No drill stern tests are anticipated, if DST's are run, the following requirements will be adhered to:

Initial opening of the drill stern test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer (AO). However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e. lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the AO. Closed chamber DST's may be accomplished day or night.

A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions. This would involve provided means for reverse circulation.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

All engines within 100 feet of the wellbore that ate required to "run" during the test have spark arresters or water cooled exhausts.

- b. The logging program will consist of Schlumberger Platform Express (or equivalent) to be run from base of surface casing to TD.
- c. No cores are anticipated.
- d. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" will be submitted no latter than 30 days after the completion of the well or after completion of operations being performed, in accordance with UDOGM Conservation General Rules. Two copies of all logs, core descriptions, core analyses, well tested data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed.

Samples (cutting, fluids, and/or gases will be submitted when requested by the AO.

- e. The anticipated completion program is as follows: Perform multistage fracs and complete all productive zones present in the wellbore. Produce all zones commingled.
- f. Daily drilling and completion progress reports shall be submitted to the UDOGM on a weekly basis.

# 7. Abnormal Temperatures and Pressures

a. The expected bottom hole pressure is 9147psig

The maximum bottom hole temperature anticipated is 274.41 degrees Fahrenheit.

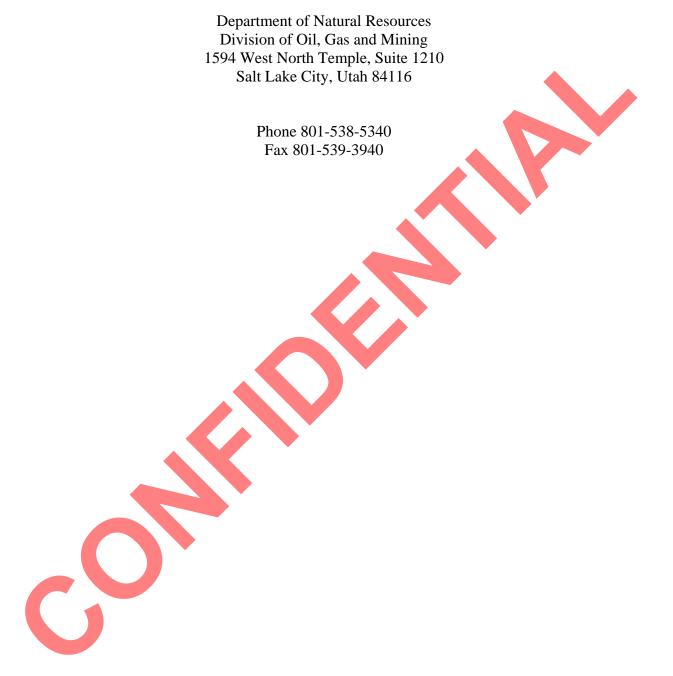
b. No hydrogen sulfide gas is anticipated. Abnormal pressures will be controlled with mud weight and 10000# BOP and rotating head.

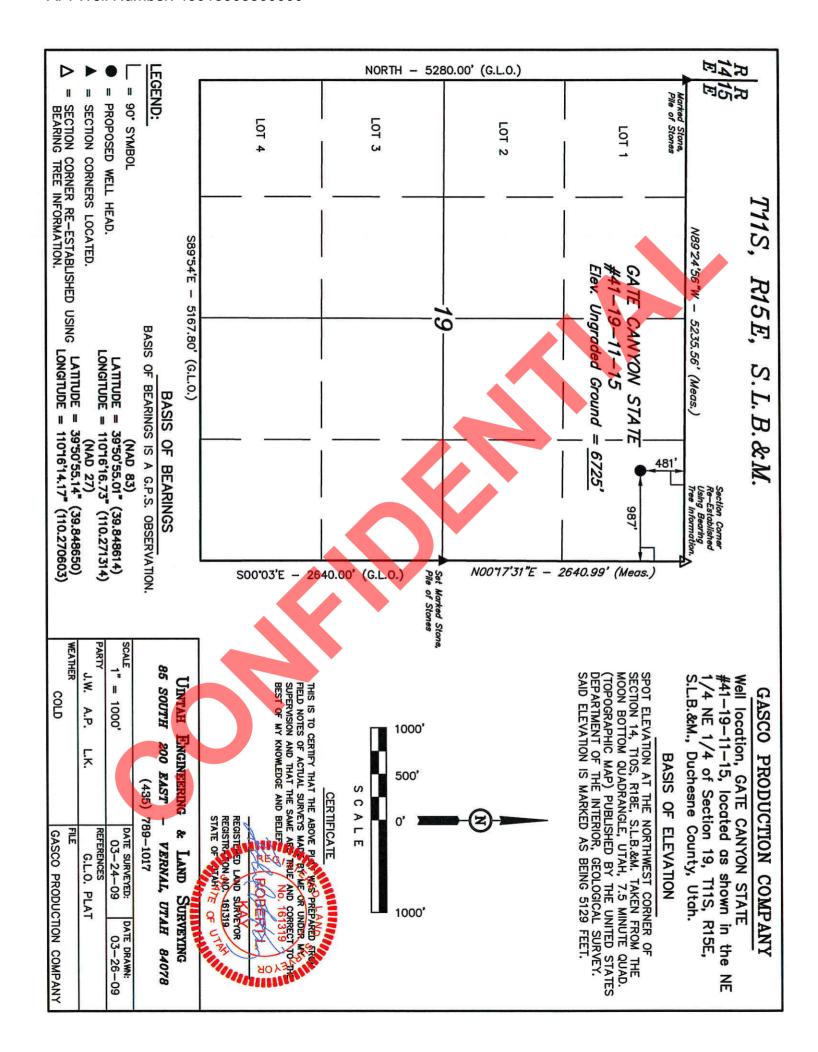
#### 8. Anticipated Starting Dates and Notifications of Operations

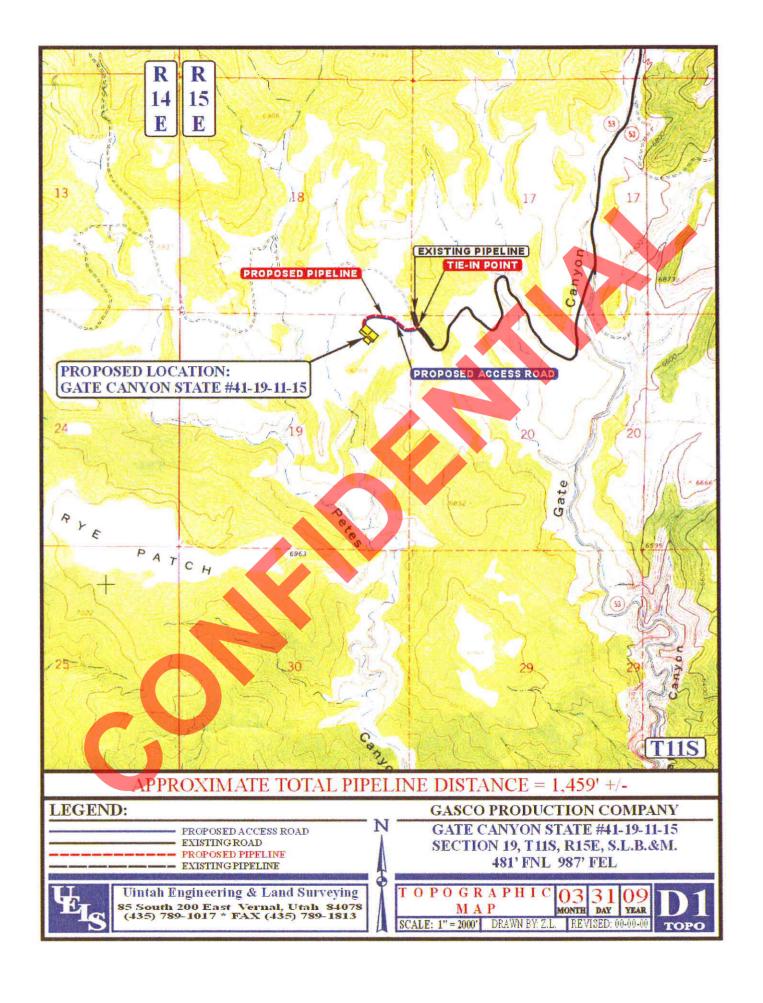
- a. Drilling is anticipated to commence immediately upon approval
- b. It is anticipated that the drilling of this well will take approximately 45 days.
- c. UDOGM shall be notified of the anticipated date of location construction and anticipated spud date.

- d. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior to approval from the AO will be obtained and notification given before resuming operations.
- e. The spud date will be reported orally to the AO within 48 hours of spudding. If the spudding occurs on a weekend or holiday, the report will be submitted via voice mail and/or e-mail to the AO.
- f. In accordance with UDOGM Consevation Genral Rules, this well will report "Monthly Report Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed with the UDOGM.
- g. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual or undesirable events shall be reported promptly to the AO in accordance with the requirements.
- h. If a replacement rig is contemplated for completion operations, a "Sundry Notice" to that effect will be filed, or prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
- i. Should the well be successfully completed for production, the AO will be notified when the well is placed on producing status. Written notification, e-mail or otherwise, will be sent no latter than 5 days following the date on which the well is placed on production.
- j. With the approval of the UDOGM Engineer, produced water may be temporarily disposed of into unlined pits for a period of 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the UDOGM Engineer.
- k. Operators are authorized to vent/flare gas during initial well evaluation test, not exceeding a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the UDOGM Engineer and approval received, for any venting/flaring of gas beyond the initial 30 day authorized test period.
- l. A schematic facilities diagram shall be submitted to UDOGM within 60 days of installation or first production whichever occurs first. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with UDOGM Conservation General Rules.
- m. A first production conference will be scheduled within 15 days after receipt of the first production notice.
- n. No well abandonment operations will commence without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" will be filed within 30 days following the completion of the well for abandonment. The report will indicate where plugs were placed and the current status of the surface restoration. Final abandonment will not be approved until the surface reclamation work has been completed to the satisfaction of the AO.

o. Lessees and operators have the responsibility of operating in a manner which conforms with the applicable Federal laws and regulations and with the State and local laws and regulations to the extent that such laws are applicable to operations on State lands.







#### **Gasco Production Company**

Well Name

NE / NE, Section 19, Township 11 South, Range 15 East Duchesne County, Utah

Lease No. UTU- #49945

#### ONSHORE OIL & GAS ORDER NO. 1

#### **Notification Requirements**

Location Construction- 48 hours prior to construction of location and access roads

Location completion- prior to moving on with drilling rig.

Spud Notice- at least 24 hours prior to spudding the well.

Casing String and

Cementing-

24 hours notice prior to running casing and cementing.

**BOP** and Related

Equipment-

24 hours prior to initiating pressure tests.

First Production

Notice-

Within 5 business days after new well begins or production

resumes after well has been off production for more than 90 days.

The onsite inspection for the subject well site will be conducted with at least one of the land management agency specialists and Gasco which may include the following individuals:

Natural Resource Specialist

Wildlife Biologist

Shon McKinnon

UDOGM Representitive UDOGM Representitive

Permit Consultant Gasco Production Company

Surveyor Uintah Engineer and Land Surveying

# 1. Existing Roads

See Attached Topographic Map "A".

Description of travel from plats.

#### 2. Planned Access Road

See Attached Topographic Map "B" for location of the proposed access road.

#### 3. Location of Existing Wells

See Attached Topographic Map "C"

#### 4. Location of Tank Batteries and Production Facilities

- a. All permanent surface equipment will be painted a Color approved by the land management agency.
- b. Storage tanks batteries will be surrounded by containment dike of sufficient capacity to contain at a minimum, the entire contents of the largest tank with in the contained area, unless more stringent requirements are necessary as notified by the AO.
- c. A production layout will be submitted via sundry upon proven productivity of the well.
- d. All loading lines will be placed inside the berm/dike surrounding the tank battery.
- e. A Gas Meter Run will be placed within 500 ft. of the wellhead. Meter runs will be housed. The oil and gas measurement equipment will be installed on the well location.

  Measurement equipment will be calibrated in place prior to any deliveries. Tests for accuracy will be conducted monthly for the first three months on new installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the calibration reports will be submitted to the Vernal Field Office.
- f. Any necessary pits will be properly fenced to prevent any wildlife entry.
- g. The access road will be maintained in a safe, usable condition conducive to the climate and seasonal conditions in order to accommodate daily operation of the well and prevent erosion.
- h. Pipelines, up to 6" steel, will follow the proposed access for approximately 1320', as detailed in attached Map "D". The pipeline will be laid on the surface except road crossings where they will be buried to a depth of 3'-5'. The method of coupling will be welded. Associated pipeline components, such as risers, pig launchers/catchers, meters, valves, etc. will be contained within the 30' needed for construction of the pipeline.

#### 5. Location and Type of Water

- a. Water will come from: Water Right No. 41-3530.
- b. Water will be hauled by commercial transport over the access roads shown on Attached Maps "A" and "B".
- c. No water well will be drilled on this lease.

#### 6. Source of Construction Material

- a. Any gravel used will be obtained from a commercial source.
- b. The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2.3.
- c. No construction materials will be used from Federal lands.

## 7. Methods of Handling Waste Disposal

- a. the reserve pit will be felted and double lined with at least 16 mil liner.
- b. All trash will be contained in an enclosed trash container through the drilling, completion, and facility construction phases and its contents removed and hauled to an approved disposal sight as needed.
- c. A chemical porta-toilet will be furnished through the drilling, and completion phases.
- d. After first production, produced waste water will be confined to an unlined pit or storage tank for a period not to exceed 90 days. During the 90 day period, in accordance with Onshore Order No. 7, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the AO's approval.
- e. Drill cuttings are to be contained and buried in the reserve pit.
- f. Any salts and/or chemicals which are an integral part of the drilling system will be disposed of in the same manner as the drilling fluid.

#### 8. Ancillary Facilities

There are no airstrips, camps or other facilities planned during the drilling of this well except for those facilities needed for drilling rig personal, service providers and company representatives.

#### 9. Well Site Layout

See attached Location Layout Diagram

## 10. Plans for Restoration of Surface

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, materials, trash and debris not required for production.
- b. Upon completion, any hydrocarbon within the reserve pit will be removed in accordance with 43 CFR 3162.7-1.
- c. The reserve pit will be backfilled and reclaimed within 120 days from the well completion. The reserve pit liner will be perforated and excess liner removed before backfilling. Alternatively, the pit will be pumped dry, the liner folded into the pit and buried to a minimum of 4' deep.

d. That portion of the location not needed for production facilities or operations, or any disturbed areas upon final plug and abandonment, will be re-contoured to approximate natural contours and seeded with a seed mixture and procedure specified by the AO. Additionally, the topsoil pile will be seeded with the same mixture and procedure as specified.

#### 11. Surface Ownership

The proposed access road and well pad is on lands managed by the State of Utah.

#### 12. Other Information

- a. An archeological survey may be conducted by an Archeological Consultant.
- b. If historic or archeological materials are uncovered during construction, the operator will immediately stop work and contact the AO.
- c. COA's from onsite will be implemented/followed.
- d. The operator will control noxious weeds along associated well pad, roads, pipelines, and surface equipment. On BLM administered land it is required that a Pesticide Use Proposal shall be submitted and approved prior to the application of pesticides or herbicides.
- e. Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on Federal lands after the conclusion of drilling operations or at any other time without BLM authorization.
- f. All lease and unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notices to Lessees. The operator is fully responsible for the actions of his subcontractors.
- g. A complete copy of the APD shall be on location during construction and drilling of this site.

#### Water Disposal

Immediately upon first production all produced water will be confined to a steel storage tank. Water will be disposed of via truck transport to a State of Utah approved disposal site, such as Brennan Bottom.

#### 13. Lessee's or Operators Representative

**Gasco Production Company** 

Roger Knight – EHS Supervisor 8 Inverness Drive East, Suite 100 Englewood, CO 80112 (303)483-0044 **Shon McKinnon (Permit Coordinator)** 

PO Box 189 Myton, Utah 84052 (435)823-8061 (435)636-3336

#### Certification

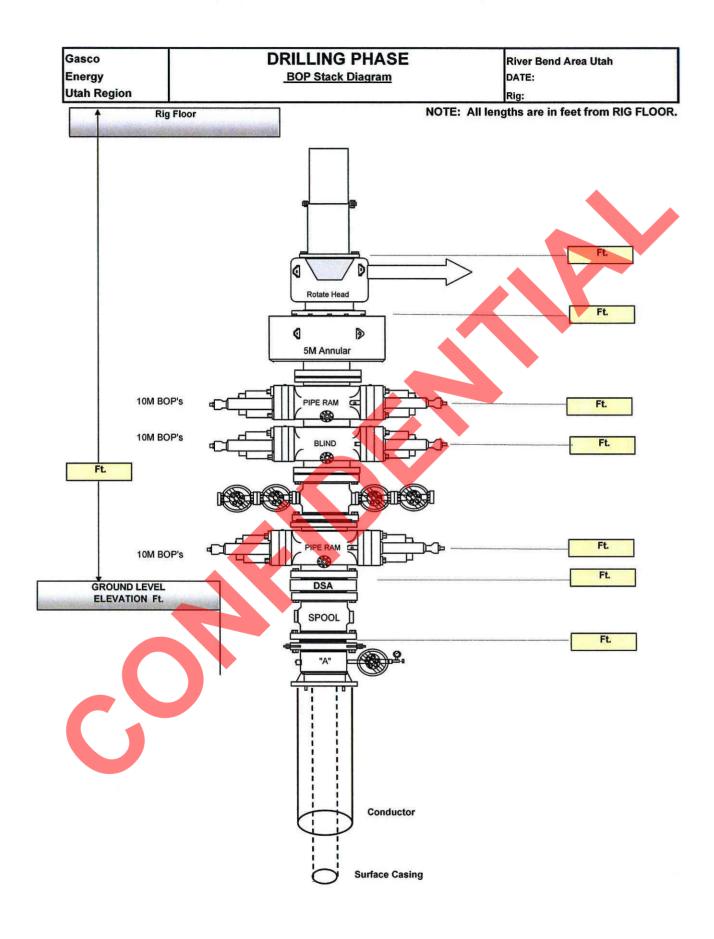
Please be advised that Gasco Production Company. is considered to be the operator of the Well Gate Canyon State, NE/NE Section 19, T11S, R15E, Lease No. UTU-49945, Duchesne County, Utah: and is responsible under the term and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Bond #1233.

I herby certify that the proposed drill site and access road have been inspected and I am familiar with the conditions that currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Gasco Production Company its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. The statement is subject to the provisions of 18 U.S.C. 1000 for the filing of a false statement.

Name Company Representative

Gasco Production Company

Date





GASCO Energy, Inc.

8 Inverness Drive East Suite 100 Englewood, CO 80112 (303) 483-0044 www.gascoenergy.com

July 13, 2011

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, Utah 84114-5801

RE: Exception Location per R649-3-3 for Gate Canyon 41-19-11-15 Duchesne County, Utah.

Ms. Mason:

Gasco Production Company is submitting this Exception Location request for GCS 41-19-11-15.

Gasco GCS 41-19-11-15 is an exception to Rule R649-3-3 Exception to Location and Siting of Wells due to topography additionally Gasco is the owner/operator of all oil and gas leases within 460' of the proposed location.

Please call or email me with any questions or comments.

Thank you

Roger Knight 303-996-1803

rknight@gascoenergy.com

# **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

July 19, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District

Michael Coulthard, Petroleum Engineer From:

2011 Plan of Development Gate Canyon Unit,

Duchesne County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the well is planned for calendar year 2011 within the Gate Canyon Unit, Duchesne County, Utah.

API# WELL NAME LOCATION

(Proposed PZ MANCOS)

43-013-50886 Gate Canyon State 41-19-11-15 Sec 19 T11S R15E 0481 FNL 0987 FEL

This office has no objection to permitting the well at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard

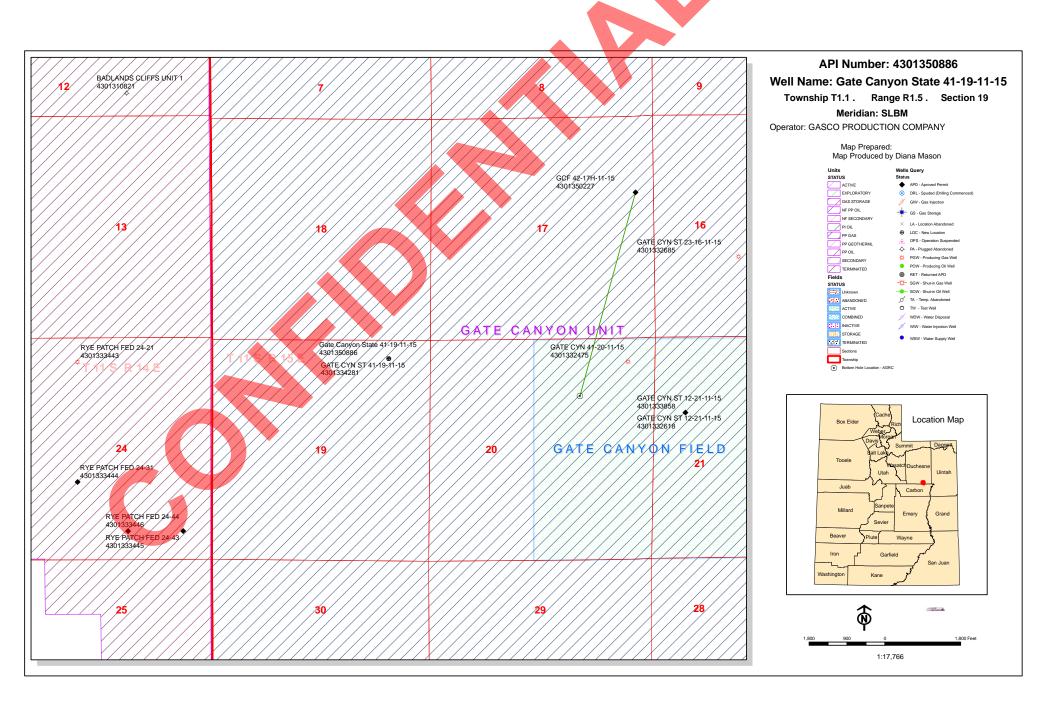
DN: cn=Michael L. Coulthard, o=Bureau of Land Management,
ou=Branch of Minerals, email=Michael\_Coulthard@blm.gov, c=US Date: 2011.07.19 08:42:24 -06'00'

bcc: File - Gate Canyon Unit

Division of Oil Gas and Mining

Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:7-19-11



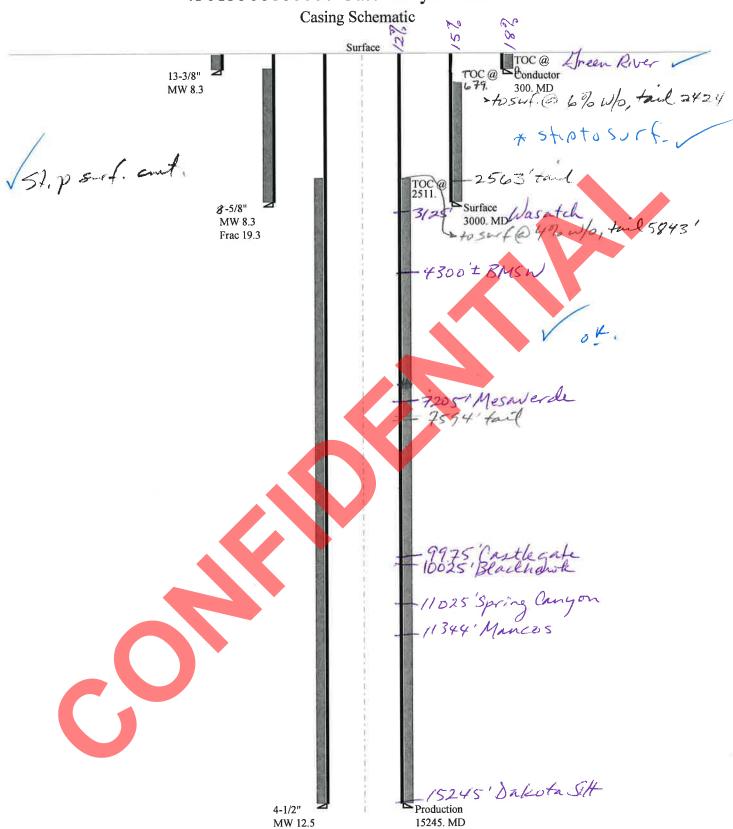
# BOPE REVIEW GASCO PRODUCTION COMPANY Canyon State 41-19-11-15 43013508860000

w us							_	
Well Name		GASCO PRO	ODL	JCTION COMP	Α	NY Gate Canyo	on	State 41-19-
String		COND		SURF		PROD		
Casing Size(")		13.375		9.625	Ţ	4.500		
Setting Depth (TVD)		300		3000	Ī	15245		
Previous Shoe Setting Dept	th (TVD)	0	ī	300	Ī	3000	Γ	
Max Mud Weight (ppg)		8.3	i	8.3	Ī	12.5	Ī	<del></del>
BOPE Proposed (psi)		0	İ	1000	ŕ	10000	Γ	<del></del>
Casing Internal Yield (psi)		1730	-	9440	ŕ	14420	Γ	<del></del>
Operators Max Anticipated	9147			H	11.5			
Calculations	CON	D String	_		_	13.375	ξľ	n .
Max BHP (psi)			ting	Depth*MW	/=			
4 /			_	1		123	4	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max	x BHP-(0.12	*Se	etting Depth	)=	93	t	NO I
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22	*Se	etting Depth	)=	1	1	NO OK
(		(*,			_	103	4	*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previo	ous	Shoe Depth	)=	63	1	NO I
Required Casing/BOPE Te					_	100	#	psi
*Max Pressure Allowed @					_	300	4	
"Max Fressure Anoweu @	Frevious Casing Shoe-		_		_	0	1	psi *Assumes lpsi/ft frac gradient
Calculations	SUR	F String				9.625	5	n e
Max BHP (psi)		.052*Sett	ting	g Depth*MW	/=	1295	i	
							1	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max	x BHP-(0.12	*Se	etting Depth)	)=	935	1	YES
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22	*Se	etting Depth	)=	635		YES OK
					4		1	*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previo	ous	Shoe Depth	)=	701	i	NO Reasonable
Required Casing/BOPE Te	est Pressure=					3000	1	psi
*Max Pressure Allowed @					_	300	†	psi *Assumes 1psi/ft frac gradient
	3				_	300	4	P
Calculations	PRO	D String				4.500	)	"
Max BHP (psi)		.052*Sett	ting	g Depth*MW	/=	9909	Ī	
							Ι	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max	x BHP-(0.12	*Se	etting Depth	)=	8080	j	YES
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22	*Se	etting Depth	)=	6555		YES OK
							1	*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previo	ous	Shoe Depth	)=	7215		NO Reasonable
Required Casing/BOPE To	est Pressure=					10000	j	psi
*Max Pressure Allowed @	Previous Casing Shoe=					3000	j	psi *Assumes 1psi/ft frac gradient
Calculations	S	tring	_		_	Т	T	"
Max BHP (psi)		.052*Sett	ting	g Depth*MW	/=		i	
					_	1.	+	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max	x BHP-(0.12	*Se	etting Depth	)=		i	NO I
MASP (Gas/Mud) (psi)		x BHP-(0.22			_	I.	#	NO I
·- (-··································	174	(3.22	~ '	2F vii.	_	1	4	*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previo	ous	Shoe Depth	)=		1	NO
					_	<u> </u>	#	<u>'</u>
Required Casing/BOPE Test Pressure=							Ц	psi

\*Max Pressure Allowed @ Previous Casing Shoe= psi \*Assumes 1psi/ft frac gradient



43013508860000 Gate Canyon State 41-19-11-15



Well name:

43013508860000 Gate Canyon State 41-19-11-15

Minimum design factors:

Operator:

**GASCO PRODUCTION COMPANY** 

String type:

Project ID:

Conductor

43-013-50886

Location:

**DUCHESNE** COUNTY

**Environment:** 

<u>Collapse</u>

Mud weight: 8.330 ppg Collapse: Design factor H2S considered? Surface temperature: No 74 °F

Design is based on evacuated pipe.

1.125

78 °F Bottom hole temperature:

Temperature gradient:

1.40 °F/100ft

Minimum section length:

100 ft

Factor

22.37 J

**Burst:** 

Design factor

1.00 Cement top: Surface

**Burst** 

Max anticipated surface

No backup mud specified,

(psi)

130

pressure:

94 psi

**Factor** 

5.702

Internal gradient: Calculated BHP

Design parameters:

0.120 psi/ft

130 psi

Tension:

8 Round STC: 8 Round LTC: 1.80 (J) 1.70 (J) 1.60 (J)

Buttress:

Premium:

Body yield:

(psi)

130

1.50 (J) 1.50 (B)

**Factor** 

13.33

(kips)

14.4

(kips)

322

Tension is based on air weight. Neutral point: 263 ft Non-directional string.

Run Seq	Segment Length (ft) 300	Size (in) 13.375	Nominal Weight (Ibs/ft) 48.00	Grade H-40	End Finish ST&C	True Vert Depth (ft) 300	Measured Depth (ft) 300	Drift Diameter (in) 12.59	Est. Cost (\$) 3719
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Sea	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design

(psi)

1730

Helen Sadik-Macdonald Prepared Div of Oil, Gas & Mining

(psi)

740

Phone: 801 538-5357 FAX: 801-359-3940

Date: September 19,2011 Salt Lake City, Utah

Remarks:

1

Collapse is based on a vertical depth of 300 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

43013508860000 Gate Canyon State 41-19-11-15

Operator:

**GASCO PRODUCTION COMPANY** 

String type:

Design is based on evacuated pipe.

Surface

Project ID:

43-013-50886

Location:

Collapse

**DUCHESNE** COUNTY

> **Environment:** Minimum design factors:

Collapse:

Design factor

1.125

H2S considered? Surface temperature: No 74 °F

Bottom hole temperature: 116 °F 1.40 °F/100ft Temperature gradient:

Minimum section length:

100 ft

Burst:

Design factor

1.00

Cement top:

679 ft

Burst

Max anticipated surface

No backup mud specified.

pressure:

Design parameters:

Mud weight:

2,640 psi

8.330 ppg

Internal gradient: Calculated BHP

0.120 psi/ft

3,000 psi

**Tension:** 

8 Round STC: 1.80 (J) 1.70 (J) 8 Round LTC:

Buttress:

1.60 (J) 1.50 (J) Premium: Body yield:

1.50 (B)

Tension is based on air weight. 2,629 ft Neutral point:

Non-directional string.

Re subsequent strings:

Next setting depth: Next mud weight: Next setting BHP:

15,245 ft 12.500 ppg 9,899 psi

Fracture mud wt: Fracture depth: Injection pressure: 19.250 ppg 3,000 ft 3,000 psi

Run Seq	Segment Length (ft) 3000	Size (in) 8.625	Nominal Weight (lbs/ft) 32.00	Grade J-55	End Finish LT&C	True Vert Depth (ft) 3000	Measured Depth (ft) 3000	Drift Diameter (in) 7.875	Est. Cost (\$) 24176	
Run Seq 1	Collapse Load (psi) 1298	Collapse Strength (psi) 2530	Collapse Design Factor 1.949	Burst Load (psi) 3000	Burst Strength (psi) 3930	Burst Design Factor 1.31	Tension Load (kips) 96	Tension Strength (kips) 417	Tension Design Factor 4.34 J	

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: September 26,2011 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 3000 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

43013508860000 Gate Canyon State 41-19-11-15 Well name:

**GASCO PRODUCTION COMPANY** Operator:

Production Project ID: String type: 43-013-50886

**DUCHESNE** COUNTY Location:

Design is based on evacuated pipe.

**Environment:** Minimum design factors: Design parameters:

H2S considered? **Collapse** Collapse: Mud weight: 12.500 ppg

1.125 Surface temperature: 74 °F Design factor Bottom hole temperature: 287 °F

1.40 °F/100ft Temperature gradient: 100 ft Minimum section length:

No

Burst:

1.00 Design factor

Cement top:

2,511 ft

Non-directional string.

**Burst** 

Max anticipated surface

pressure: 6,545 psi Internal gradient: 0.220 psi/ft

Calculated BHP 9,899 psi

No backup mud specified.

Tension:

9899

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC: 1.60 (J) **Buttress:** 

1.50 (J) Premium: Body yield: 1.60 (B)

Tension is based on buoyed weight. 12,356 ft Neutral point:

Measured True Vert Drift Est. Nominal End Run Segment Cost Weight Depth Depth **Diameter** Sea Length Size **Grade** Finish (ft) (in) (lbs/ft) (ft) (ft) (in) (\$) 95586 15245 15245 3.701 1 15245 4.5 15.10 P-110 LT&C **Burst Tension** Tension Tension Collapse Collapse Collapse Burst **Burst** Run Design Load Strength Design Strength Design Load Strength Load Seq **Factor** (kips) (kips) **Factor** (psi) **Factor** (psi) (psi) (psi)

14420

1.46

186.6

Helen Sadik-Macdonald Prepared Div of Oil, Gas & Mining

14350

.450

Phone: 801 538-5357 FAX: 801-359-3940

Date: September 19,2011 Salt Lake City, Utah

406

2.18 J

Remarks:

1

9899

Collapse is based on a vertical depth of 15245 ft, a mud weight of 12.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

From: Jim Davis

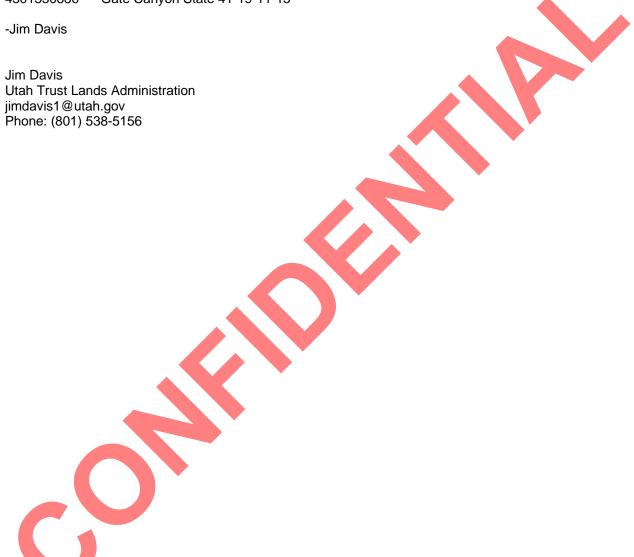
To: APD APPROVAL; rknight@gascoenergy.com

**Date:** 12/12/2011 2:25 PM

**Subject:** APD approval (one for Gasco)

The following APD has been approved by SITLA including arch clearance. As recommended in the paleo survey report, paleo monitoring of all road and pad construction will be a condition of SITLA's approval. Gasco, please acknowledge this stipulation by a reply to this email.

4301350886 Gate Canyon State 41-19-11-15



# **ON-SITE PREDRILL EVALUATION**

# Utah Division of Oil, Gas and Mining

**Operator** GASCO PRODUCTION COMPANY

Well Name Gate Canyon State 41-19-11-15

API Number 43013508860000 APD No 4222 Field/Unit UNDESIGNATED

**Location: 1/4,1/4** NENE **Sec** 19 **Tw** 11.0S **Rng** 15.0E 481 FNL 987 FEL

GPS Coord (UTM) 562401 4411006 Surface Owner

#### **Participants**

Richard Powell (DOGM), Jim Davis (SITLA), Alex Hansen (DWR), Jesse Duncan (Gasco)

#### Regional/Local Setting & Topography

This location sits on a high bench about 2.5 miles north of Nine Mile Canyon and approximately 1 mile west of Gate Canyon. The location slopes to the east to a small wash which then drains south toward Petes Canyon. Petes Canyon is a side canyon extending to the north of Nine Mile. Myton, UT is approximately 28 miles to the north.

#### Surface Use Plan

#### **Current Surface Use**

Wildlfe Habitat

New Road Miles Well Pad Src Const Material Surface Formation

0.25 Width 215 Length 380 Onsite UNTA

**Ancillary Facilities** N

#### **Waste Management Plan Adequate?**

#### Y

#### **Environmental Parameters**

Affected Floodplains and/or Wetlands N

#### Flora / Fauna

Deer, elk, coyote, rabbits and other small mammals, song birds, raptors Sage, prickly pear cactus, grasses, shrubs

#### Soil Type and Characteristics

Sandy clay soil with scattered flag stone on the surface.

Erosion Issues N

**Sedimentation Issues** N

Site Stability Issues N

#### **Drainage Diverson Required?** Y

Drainage diversion needed around northwest corner of location

Berm Required? Y

**Erosion Sedimentation Control Required?** N

12/19/2011 Page 1

Paleo Survey Run? Paleo Potental Observed? N Cultural Survey Run? Y Cultural Resources? N

#### **Reserve Pit**

Site-Specific Factors	Site Ranking
Distance to Groundwater (feet)	>200 0
Distance to Surface Water (feet)	>1000 0
Dist. Nearest Municipal Well (ft)	>5280 0
Distance to Other Wells (feet)	>1320 0
Native Soil Type	Mod permeability 10
Fluid Type	Fresh Water 5
Drill Cuttings	Normal Rock 0
<b>Annual Precipitation (inches)</b>	10 to 20 5
Affected Populations	
<b>Presence Nearby Utility Conduits</b>	Not Present 0
	Final Score 20 1 Sensitivity Level

#### **Characteristics / Requirements**

The reserve pit will be placed in cut in a stable location. The pit will be 100ft x 150ft x 10ft deep with a total capacity including freeboard of 13,900bbl. Jesse Duncan of Gasco said they are willing to usewhatever liner is required. In the application Gasco said they would use a double 16 mil liner with a felt subliner. This seems reasonable for this site due to the close proximity to a deep canyon.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 32 Pit Underlayment Required? Y

#### **Other Observations / Comments**

<b>Evaluator</b>	7			Date / Time
Richard Powell			47	8/10/2011

12/19/2011 Page 2

# Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	<b>Surf Owner</b>	<b>CBM</b>
4222	43013508860000	LOCKED	GW	S	No
Operator	GASCO PRODUCTION COM	IPANY	<b>Surface Owner-APD</b>		
Well Name	Gate Canyon State 41-19-11-15	5	Unit	GATE CANY	ON
Field	UNDESIGNATED		Type of Work	DRILL	
Location	NENE 19 11S 15E S	481 FNL 987 FE	L GPS Coord (UTM)	562332E 4411	210N

#### **Geologic Statement of Basis**

12/19/2011

Gasco has proposed 300' of surface casing and 3,000' of intermediate casing at the proposed location. Both are to be cemented to surface. The base of the moderately saline water is estimated to at approximately 4,300'. A search of Division of Water Rights records shows no water wells within a 10,000' radius of the proposed location. The surface formation at this location is the Green River Formation. This area can be considered a recharge area for aquifers in the Green River Formation. The Green River Formation is made up of interbedded sands, limestones and shales. The proposed casing and cementing program should adequately protect the recharge area and any useable sources of ground water.

Brad Hill

APD Evaluator

Date / Time

#### **Surface Statement of Basis**

This location is on state owned surface with state owned minerals. Jim Davis of SITLA was present as the land owner representative. Mr. Davis was concerned about the access road and question why it did not enter from section 18 and he planned to look into this to determine why the route was chosen because coming from the north there would be no need to create an additional crossing over the wash to the east of this location. A small drainage was discussed and will need to be diverted around the north west corner of the location. Mr. Duncan agreed to this and it is indicated on the survey map. Alex Hansen of DWR stated that this site is crucial deer winter range and requested that construction and drilling activities not take place from November 1 to April 15. A double 16 mil liner with felt will be used in the reserve pit.

Richard Powell 8/10/2011
Onsite Evaluator Date / Time

#### Conditions of Approval / Application for Permit to Drill

Category		Condition
Pits		A double synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and
		maintained in the reserve pit.
Surface		The well site shall be bermed to prevent fluids from leaving the pad.
Surface		The reserve pit shall be fenced upon completion of drilling operations.
Surface		Drainages adjacent to the proposed pad shall be diverted around the location.

RECEIVED: December 19, 2011

## **WORKSHEET** APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 7/13/2011 **API NO. ASSIGNED:** 43013508860000

WELL NAME: Gate Canyon State 41-19-11-15

**OPERATOR:** GASCO PRODUCTION COMPANY (N2575) PHONE NUMBER: 303 996-1803

**CONTACT:** Roger Knight

PROPOSED LOCATION: NENE 19 110S 150E Permit Tech Review:

> Engineering Review: **SURFACE:** 0481 FNL 0987 FEL

> **BOTTOM: 0481 FNL 0987 FEL Geology Review:**

**COUNTY: DUCHESNE LATITUDE: 39.84862** 

UTM SURF EASTINGS: 562332.00

FIELD NAME: UNDESIGNATED

LEASE TYPE: 3 - State

LEASE NUMBER: ML-49945 PROPOSED PRODUCING FORMATION(S): MANCOS

SURFACE OWNER: 3 - State **COALBED METHANE: NO** 

#### LOCATION AND SITING: **RECEIVED AND/OR REVIEWED:** R649-2-3. PLAT Unit: GATE CANYON Bond: STATE - 4127763 **Potash** R649-3-2. General Oil Shale 190-5 **Oil Shale 190-3** R649-3-3. Exception Oil Shale 190-13 **Drilling Unit Board Cause No:** R649-3-3 Water Permit: 41-3530 **Effective Date: RDCC Review: Fee Surface Agreement** Siting: Intent to Commingle R649-3-11. Directional Drill **Commingling Approved**

**Comments:** Presite Completed

Stipulations: 1 - Exception Location - dmason

23 - Spacing - dmason 25 - Surface Casing - hmacdonald

LONGITUDE: -110.27138 NORTHINGS: 4411210.00 API Well No: 43013508860000



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

# **Permit To Drill**

\*\*\*\*\*

Well Name: Gate Canyon State 41-19-11-15

**API Well Number:** 43013508860000

Lease Number: ML-49945 Surface Owner: STATE Approval Date: 12/19/2011

#### **Issued to:**

GASCO PRODUCTION COMPANY, 8 Inverness Dr. East, Suite 100, Englewood, CO 80112

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-3. The expected producing formation or pool is the MANCOS Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### **Exception Location:**

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

API Well No: 43013508860000

#### **Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels OR
- submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

#### **Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

#### **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas Sundry Number: 33214 API Well Number: 43013508860000

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES		FORM 9
	5.LEASE DESIGNATION AND SERIAL NUMBER: ML-49945		
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for pro current bottom-hole depth, FOR PERMIT TO DRILL form	oposals to drill new wells, significantly de reenter plugged wells, or to drill horizonta n for such proposals.	epen existing wells below Il laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: GATE CANYON
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: GATE CANYON ST 41-19-11-15
2. NAME OF OPERATOR:			9. API NUMBER: 43013508860000
3. ADDRESS OF OPERATOR: , , , Ext	P	HONE NUMBER:	9. FIELD and POOL or WILDCAT: UNDESIGNATED
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0481 FNL 0987 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 9 Township: 11.0S Range: 15.0E Meridiar	n: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
· /	ACIDIZE	ALTER CASING	CASING REPAIR
Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
12/19/2013	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12 DESCRIBE BRODOSED OR	COMPLETED OPERATIONS. Clearly show all		·
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show all	pertinent details including dates, t	Approved by the
			<b>Utah Division of</b>
			Oil, Gas and Mining
			Date: December 24, 2012
			By: Basylll
NAME (PLEASE PRINT) Roger Knight	PHONE NUMBER 303 996-1803	TITLE EHS Supervisor	
SIGNATURE	, ,	DATE	
N/A		12/19/2012	

Sundry Number: 33214 API Well Number: 43013508860000



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43013508860000

**API:** 43013508860000

Well Name: GATE CANYON ST 41-19-11-15

Location: 0481 FNL 0987 FEL QTR NENE SEC 19 TWNP 110S RNG 150E MER S

Company Permit Issued to: GASCO PRODUCTION COMPANY

Date Original Permit Issued: 12/19/2011

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No
<ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?</li> <li>Yes</li> <li>No</li> </ul>
• Has the approved source of water for drilling changed? 🔘 Yes 🌘 No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No

Signature: Roger Knight Date: 12/19/2012

Title: EHS Supervisor Representing: GASCO PRODUCTION COMPANY

	FORM 9		
ı	5.LEASE DESIGNATION AND SERIAL NUMBER: ML-49945		
	Y NOTICES AND REPORTS ON	_	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly dee reenter plugged wells, or to drill horizontal n for such proposals.		7.UNIT or CA AGREEMENT NAME: GATE CANYON
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: GATE CANYON ST 41-19-11-15
2. NAME OF OPERATOR: GASCO PRODUCTION COMP	PANY		<b>9. API NUMBER:</b> 43013508860000
3. ADDRESS OF OPERATOR: 8 Inverness Dr. East, Suite	PH: 100 , Englewood, CO, 80112	ONE NUMBER: 303 996-1805 Ext	9. FIELD and POOL or WILDCAT: UNDESIGNATED
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0481 FNL 0987 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NENE Section: 1	IIP, RANGE, MERIDIAN: 9 Township: 11.0S Range: 15.0E Meridian:	S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
7	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	✓ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
11/1/2013	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show all pe	ertinent details including dates, d	lepths, volumes, etc.
Gasco proposes t	o change the conductor & surfa	ice casing, and the	REQUEST DENIED
drilling fluids pro	ogram as outlined in the attach program.	ed revised drilling	Utah Division of Oil, Gas and Mining
			Date: November 05, 2013
			By: Dod K Quit
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE	
Jessica Berg	303 996-1805	Regulatory Analyst	
SIGNATURE N/A		DATE 10/23/2013	



# The Utah Division of Oil, Gas, and Mining

- State of UtahDepartment of Natural Resources

**Electronic Permitting System - Sundry Notices** 

**Sundry Conditions of Approval Well Number 43013508860000** 

Surface casing proposal to drill into potential hydrocarbon bearing zone and without **BOPE/Diversion** is inadequate.

RECEIVED: Nov. 05, 2013

Gasco Production Company
Gate Canyon State 41-19-11-15
NE/NE, Section #19, Township 11 South, Range 15 East
Duchesne County, Utah
Lease No. UTU- #ML-49945

# **Drilling Program**

#### 1. <u>Estimated Tops of Important Geological Markers</u>

<b>Formation</b>	Depth	Subsea
Wasatch	3125'	+3560
Mesaverde	7205'	-520'
Castlegate	9975'	-3090'
Blackhawk	10025'	-3340'
Spring Canyon	11025'	-4340'
Mancos	11344'	-4659'
Dakota Silt	15245'	-8560
TD	15245'	

#### 2. Estimated Depth of Anticipated Water, Oil, Gas or Mineral Formations

Substance	Formation	Depth
Gas	Wasatch	3400' – 7205'
Gas	Mesaverde	7205' – 9975'
Gas	Blackhawk	10025' - 11125'
Gas	Mancos	11225' - 15245'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

#### 3. Pressure Control Equipment

All well control equipment will be in accordance to UDOGM Conservation Rules for 10M Systems and are as follows:

10,000# BOP with 4 ½" Pipe Rams 10,000# BOP with Blind Rams 5,000# Annular

Ram type preventers and associated equipment shall be tested to the approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline on pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

#### **Pressure Control Equipment Continued**

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed;
- b. whenever any seal subject to test pressure is broken
- c. following related repairs; and
- d. at 30 day intervals

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) the check valve shall be held open or the ball removed.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip, however, this function need not be performed more that once a day.

A BPOPE pit level drill shall be conducted weekly for each drilling crew.

Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log.

BOP systems shall be consistent with API RP 53 Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling cement plugs.

A rotating head will be utilized to set surface casing as in the casing and string design. This would be used as a diverter.

UDOGM will be notified, with sufficient lead time, in order to have a UDGOM representative on location during testing.

- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not yet been chosen to drill this well, most of the equipment for this depth will utilize 10M working BOP.
- b. A choke line and kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

#### 4. Proposed Casing and Cementing Program

a. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones abnormally pressured zones and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors including: presence/absence of hydrocarbons, fracture gradients, usable water zones, formation pressures, lost circulation zones, other minerals, or other unusual characteristics. All indications of usable water shall be reported.

b. Casin	ig Program				
	Depth	Hole Size	<u>O.D.</u>	<u>Grade</u>	<u>Type</u>
Conductor	60'	20"	16"	H-40	-
Surface	3500'	11"	8 5/8"	N-80	LT&C
Production	15245'	7 7/8"	4 ½"	P-110	LT&C

c. Casing design subject to revision based on geologic conditions encountered.

d.	Cement Program
----	----------------

	Est. Top of Cement	Cement Type	<u>Yield</u>	Supply Wt.	
Conductor	400	sxs Premium Type 5	1.18	15.6	
Surface	326	sx Hilift	3.91	11	
	185	sx10-2 RFC	1.60	14.2	
Production	523 1876'	sx Hilift	3.05 1.28	11.5 14.1	
	1670	sx 50/50 poz	1.20	14.1	

- e. Anticipated cement tops will be reported as to depth; not the expected number of sacks of cement to be used. UDOGM should be notified, with sufficient lead time, in order to have a UDOGM representative on location while running all casing strings and cementing.
- f. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the driller's log.
- g. The following reports shall be filed with UDOGM within 30 days after the work is completed.
- 1. Progress reports, per UDOGM Conservation General Rules "Sundry Notices and Reports on Wells", must

Include complete information concerning:

a. Setting of each string of casing, showing the size, grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing,

depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.

- b. Temperature or bond log must be submitted for each well where the casing cement was not circulated to the surface.
- c. Auxiliary equipment to be used is as follows:
  - 1. Kelly cock
  - 2. A bit float
  - 3. A sub with full opening valve.

#### 5. Drilling Fluids Program:

Interval Type 0-60'	Wt. (ppg) Fresh water 8.33		<u>рН</u> 7.0	Water Loss NA	Remarks
60'-3500'	Fresh water 8.33	35	7.0	NA	
3000'-TD Fres	h water& DAP 9.0	- 11.5 38	7.0	10-12	

- a. Sufficient quantities of mud material will be maintained on site or be readily available for the purpose of assuring well control. SPR will be recorded on a daily drilling report after mudding up. Visual mud monitoring will be conducted during operations.
- b. No chromate additives will be used in the mud system on State lands without prior UDOGM approval to ensure adequate protection of fresh water aquifers.
- c. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well.
- d. The use of materials under UDOGM jurisdiction will conform to the Conservation General Rules.
- e. Water will come from: Water Right No. 41-3530.
- f. Water will be hauled by commercial transport over the access roads shown on Attached Maps "A" and "B".
- g. No water well will be drilled on this lease

#### **Evaluation Program**

The anticipated type and amount of testing, logging and coring are as follows:

a. No drill stern tests are anticipated, if DST's are run, the following requirements will be adhered to:

Initial opening of the drill stern test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer (AO). However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e. lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the AO. Closed chamber DST's may be accomplished day or night.

A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions. This would involve provided means for reverse circulation.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

All engines within 100 feet of the wellbore that ate required to "run" during the test have spark arresters or water cooled exhausts.

- b. The logging program will consist of Schlumberger Platform Express (or equivalent) to be run from base of surface casing to TD.
- c. No cores are anticipated.
- d. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" will be submitted no latter than 30 days after the completion of the well or after completion of operations being performed, in accordance with UDOGM Conservation General Rules. Two copies of all logs, core descriptions, core analyses, well tested data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed.

Samples (cutting, fluids, and/or gases will be submitted when requested by the AO.

- e. The anticipated completion program is as follows: Perform multistage fracs and complete all productive zones present in the wellbore. Produce all zones commingled.
- f. Daily drilling and completion progress reports shall be submitted to the UDOGM on a weekly basis.

## 7. Abnormal Temperatures and Pressures

a. The expected bottom hole pressure is 9147psig

The maximum bottom hole temperature anticipated is 274.41 degrees Fahrenheit.

b. No hydrogen sulfide gas is anticipated. Abnormal pressures will be controlled with mud weight and 10000# BOP and rotating head.

# 8. Anticipated Starting Dates and Notifications of Operations

- a. Drilling is anticipated to commence immediately upon approval
- b. It is anticipated that the drilling of this well will take approximately 35 days.
- c. UDOGM shall be notified of the anticipated date of location construction and anticipated spud date.

- d. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior to approval from the AO will be obtained and notification given before resuming operations.
- e. The spud date will be reported orally to the AO within 48 hours of spudding. If the spudding occurs on a weekend or holiday, the report will be submitted via voice mail and/or e-mail to the AO.
- f. In accordance with UDOGM Consevation Genral Rules, this well will report "Monthly Report Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed with the UDOGM.
- g. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual or undesirable events shall be reported promptly to the AO in accordance with the requirements.
- h. If a replacement rig is contemplated for completion operations, a "Sundry Notice" to that effect will be filed, or prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
- i. Should the well be successfully completed for production, the AO will be notified when the well is placed on producing status. Written notification, e-mail or otherwise, will be sent no latter than 5 days following the date on which the well is placed on production.
- j. With the approval of the UDOGM Engineer, produced water may be temporarily disposed of into unlined pits for a period of 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the UDOGM Engineer.
- k. Operators are authorized to vent/flare gas during initial well evaluation test, not exceeding a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the UDOGM Engineer and approval received, for any venting/flaring of gas beyond the initial 30 day authorized test period.
- l. A schematic facilities diagram shall be submitted to UDOGM within 60 days of installation or first production whichever occurs first. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with UDOGM Conservation General Rules.
- m. A first production conference will be scheduled within 15 days after receipt of the first production notice.
- n. No well abandonment operations will commence without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" will be filed within 30 days following the completion of the well for abandonment. The report will indicate where plugs were placed and the current status of the surface restoration. Final abandonment will not be approved until the surface reclamation work has been completed to the satisfaction of the AO.

o. Lessees and operators have the responsibility of operating in a manner which conforms with the applicable Federal laws and regulations and with the State and local laws and regulations to the extent that such laws are applicable to operations on State lands.

Department of Natural Resources Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, Utah 84116

> Phone 801-538-5340 Fax 801-539-3940

			FORM 9
	STATE OF UTAH DEPARTMENT OF NATURAL RESOUR		I OKW 3
	5.LEASE DESIGNATION AND SERIAL NUMBER: ML-49945		
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly reenter plugged wells, or to drill horize n for such proposals.		7.UNIT or CA AGREEMENT NAME: GATE CANYON
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: GATE CANYON ST 41-19-11-15
2. NAME OF OPERATOR: GASCO PRODUCTION COM	PANY		9. API NUMBER: 43013508860000
3. ADDRESS OF OPERATOR: 8 Inverness Dr. East, Suite	100 , Englewood, CO, 80112	PHONE NUMBER: 303 996-1805 Ext	9. FIELD and POOL or WILDCAT: UNDESIGNATED
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0481 FNL 0987 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NENE Section: 1	HIP, RANGE, MERIDIAN: 19 Township: 11.0S Range: 15.0E Meri	dian: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
1/1/2014	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
i i	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
	_		✓ APD EXTENSION
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	all pertinent details including dates,	CONTROL MARKET BANK BANK BANK
			Approved by the Utah Division of Oil, Gas and Mining
			Date: December 30, 2013
			By: Boogyill
			33
NAME (PLEASE PRINT)	PHONE NUMI	BER TITLE	
Jessica Berg	303 996-1805	Regulatory Analyst	
SIGNATURE N/A		<b>DATE</b> 12/21/2013	



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43013508860000

**API**: 43013508860000

Well Name: GATE CANYON ST 41-19-11-15

Location: 0481 FNL 0987 FEL QTR NENE SEC 19 TWNP 110S RNG 150E MER S

Company Permit Issued to: GASCO PRODUCTION COMPANY

Date Original Permit Issued: 12/19/2011

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No
<ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?  Yes  No
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No
neture: Joseph Borg

Signature: Jessica Berg Date: 12/21/2013

Title: Regulatory Analyst Representing: GASCO PRODUCTION COMPANY



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Executive Director

Division of Oil, Gas and Mining

January 8, 2015

JOHN R. BAZA
Division Director

Gasco Production Company 7979 Tufts Ave., Suite 1150 Denver, CO 80237

Re:

APD Rescinded - Gate Canyon St 41-19-11-15, Sec. 19, T.11S, R.15E,

Duchesne County, Utah API No. 43-013-50886

#### Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on December 19, 2011. On December 24, 2012 and December 30, 2013 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective January 8, 2015.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

**Environmental Scientist** 

cc:

Well File

SITLA, Ed Bonner

